

REMARKS

In the Office Action, the Examiner indicated that claims 1 through 3 are pending in the application and the Examiner rejected all claims.

Claim Rejections, 35 U.S.C. § 103

On page 3 of the Office Action, the Examiner maintained the previous rejection of claims 1-3 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,221,526 to Tanishita in view of U.S. Patent No. 6,049,725 to Emmert.

The Present Invention

The present invention provides a connector for charging a mobile phone in which a charging state of the charging system can be determined by a light emitting element that changes its color according to an amount of a charging voltage. The connector includes an upper and lower cover. In a particular embodiment, the upper cover forms a hole for securing a protective window.

U.S. Patent No. 6,221,526 to Tanishita

U.S. Patent No. 6,221,526 to Tanishita (“Tanishita”) teaches an auxiliary power source device for a portable electronic instrument. It includes an “attaching terminal” 2 (see, e.g., Figures 1-4). The Examiner acknowledges that Tanishita does not disclose a light emitting element disposed on a printed circuit board that is electrically connected to a mobile phone by a pin. The Examiner further acknowledges that Tanishita does not disclose a light emitting element configured as above

that changes color according to an amount of charging voltage being provided by the power source.

In fact, Tanishita does not disclose a light of any kind in its connector.

U.S. Patent No. 6,049,725 to Emmert

U.S. Patent No. 6,049,725 to Emmert (“Emmert”) teaches a charging cradle that receives a radiotelephone for the purpose of charging the radiotelephone. The radiotelephone (108) (not the cradle or any connection element for connecting the radiotelephone to the cradle) includes an indicator 120 in the knuckle of its hinge, which indicator is visible when the phone is in the charging base, enabling viewing of the charging status when charging. Emmert further discloses an embodiment where a multi-color LED is used for indicator 120 so that instead of the performing the single function of indicating the charging status, the multi-color LED can be used to indicate other *non-charging* states of the telephone, e.g., “IN USE”, “ROAM”, and “No SVC”.

The Examiner has not Established a *prima facie* Case of Obviousness

As set forth in the MPEP:

To establish a *prima facie* case of obviousness, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skilled in the art, to modify the reference or to combine reference teachings.

MPEP 2143

The Examiner acknowledges that Tanishita contains no teaching or suggestion of a connector having a multi-color indicator or LED disposed on a printed circuit board that is electrically connected to a mobile phone by a pin, whereby the indicator/LED changes its color according to an

amount of a charging voltage. Applicant acknowledges that Emmert teaches a multi-color indicator; however Emmert does not teach or suggest a multi-color indicator disposed *on a connector*, nor an indicator that changes colors based on the amount of charging voltage being delivered by the charging circuit associated with the connector. The indicator of Emmert is disposed *on the radio-telephone device* itself and displays *a single color when charging is occurring*; the multi-color aspect of the indicators comes into play only when the indicator is being used to display different types of conditions not related to charging, i.e., an IN USE mode, a ROAM mode, etc.

The present invention as claimed in independent claim 1 is a *connector for coupling to or separating from* a mobile phone. The *connector* includes a light emitting element, and the light emitting element changes its color *from yellow, red, and green in order according to the amount of charging voltage*. These elements are all specifically claimed in independent claim 1, and **none** of them are taught or suggested by the cited references. If one were to combine the Tanishita and Emmert references as proposed by the Examiner, at best the result would be a telephone (not a connector) having an LED *on the* telephone that can change color to indicate the occurrence of various *non-charging* functions as well as a single (charging/not-charging) charging function indicated by a single color, but *not* multiple charging *states* using multiple colors for each different state. Further, since the light of Emmert is situated on the phone, when a user takes away the telephone for use, the charging connector remaining would not have any lights on it and if another user of the charging connector attempted to charge a phone that did *not* have lights on it like the Emmert phone does, there would be NO light indication of a charging state, period. Thus, the combination does not reasonably suggest (and, of course, does not teach) the claimed invention.

Without such a teaching or suggestion, the combination of Tanishita and Emmert proposed by the Examiner does not render the claimed invention obvious.

The dependant claims include these same elements and for this reason are also patentable over the Tanishita/Emmert combination. In addition, the dependent claims include additional elements not taught or suggested by the Tanishita/Emmert combination, including the inclusion of a protective window that covers the LED to protect it from harm during use. Applicant submits that while a light-pipe transmits light from one location to an external location where it can be viewed, its function is not protective and in fact it is an internal part of the device, since it must be situated at one end adjacent the LED source and at the other end near an external part of a device in which it is being used. By contrast, the window claimed in claim 3 need only be situated at an external portion of the connector over the hole formed in the upper cover. For these additional reasons, the claims are in allowable condition. Accordingly, the Examiner is respectfully requested to reconsider and withdraw the rejection of the claims.

Conclusion

The present invention is not taught or suggested by the prior art. Accordingly, the Examiner is respectfully requested to reconsider and withdraw the rejection of the claims. An early Notice of Allowance is earnestly solicited.

Applicant is filing a Notice of Appeal concurrently herewith. The Commissioner is hereby authorized to charge any additional fees or credit any overpayment associated with this communication to Deposit Account No. 19-5425.

Respectfully submitted

October 15, 2007
Date

/Mark D. Simpson/
Mark D. Simpson, Esquire
Registration No. 32,942

SYNNESTVEDT LECHNER & WOODBRIDGE LLP
112 Nassau Street
P.O. Box 592
Princeton, NJ 08542

Telephone: (609) 924 3773
Facsimile: (609) 924 1811
Email: MSimpson@synnlech.com